

A Red-Headed Prehistoric Cave-Dwelling Family of Northern Europe. From Painting by P. Jamin.

Magnified Cross Section of the Skin-

A-(On the Left)-Black Pigment Cells of the Brunette.

B—(On the Right)—Light Pigment Cells of the Blande. Light Rays of the Tropical Sun Are Retarded by the Dark Pigment, but Pass Easily Through the Light Pigment Cells. C-The Hair Is Nourished by the Arteries Which Carry Black Pigment to the Brunettes and Red Granules to the Red-Headed.

By Arthur C. Jacobson, M. D. Associate Editor of the Medical Times.

TS red hair of any significance as regards temperament? Are red-haired persons more nervous, quicker tempered, more charged with vitality, more resistant to disease, more passionate, and less likely to be stout than other people? Can we infer anything as to the intellectual, physical and temperamental connotations of red hair from a consideration of the famous personages who have possessed more or

less ruddy thatch? Have all the beliefs about red hair been superstitions, or is there any scientific basis for them? Science has some facts to present which bear directly on these beliefs and ancient traditions.

We find Aristotle, in the fourth century before Christ, preoccupied with the attempt to correlate physical and temperamental traits. So also Galen, in the second century after Christ. Later, we find Paulus Aegineta struggling with the problem in the seventh century of our era. Out of these considerations we find that there gradually evolve, among physicians rather definite notions regarding temperament and physical traits.

These early physicians came finally to speak of people as belonging to one of four groups, according as they were of the sanguine, phlegmatic, choleric or neryous type of temperament. Hair color figured in this fanciful speculation, along with other physical characters. Red-haired people were assigned to the sanguine group, and were expected to live up to the role kindly arranged for them by the ethnolog-

ists and physicians. Lavater, who was born in 1741, did much to popularize the idea that the hair affords variety of indications of the temperament of the individual, of his powers, of his habits of thought, and, consequently, of his

intellectual faculties. Taking their cue from Lavater, many writers have assumed such things as that rapidity of the circulation, love of change and vivacious imagination are attributes of people with chestnut-colored hair; that athsetic strength and vigor, energy, ambition and the passions are traits of black-haired people, and that a soft and lax fibre, mildness, tenderness and affection, calmness and good judgment are associated with

Many legends have developed about red haid. Red is the symbol of fire, and fancy has taken its start right here. A stenographed testified in court the other day that she believed red-haired men made ideal lovers, and volunteered the interesting information that "girls love the ferocity of a red-haired man." A great many men have similarly naive notions about red-haired women, and in folklore the lighter shades of red in women are often-provided, if you please, that the hair is soft-linked with great steadiness of purpose and an unfaltering loyalty in love.

A factor to be considered in this connec-

tion is the undoubted fact that a good many red-haired people have played up some of the traditions themselves, for one purpose or another, and have banked a good deal on the possession of red hair by some characters famous for their personalities and

A Red-Headed Chimpanzee.

By Freidenthal.

Paris, the lover of Helen, is alleged to have had red hair. Cleopatra, Peter the Great, Eric the Red (discoverer of America); William Rufus, the second Norman King of England; Barbarossa, the great hero of the East; Frederick the Great of Germany, John Bunyan, James Russell Lowell, Swinburne, William the Silent, Savonarola, Thomas Hobbes and Queen Elizabeth possessed hair that was more or

Artists have with great frequency represented the Saviour as red-haired, though the little we know about the physical traits of Jesus are summed up in the remark of Saint Clement of Alexandria that "Jesus had no beauty of face; His person had no physical attractions; He only possessed beauty of soul, which is the true beauty," and in that of Saint Irenaeus, a disciple of Saint Polycarp, who was a disciple of Saint John, to the effect that his master had often heard the beloved disciple say that the hair of Jesus had already turned white when He began His mission. A study of the available ethnological

data justifies the conclusion that the most

universal colors are dark-brown and black, and that there are isolated cases in all races of individuals with hair of more or less reddish color.

Red-haired Hebrews are not uncommon, though the race in general has dark complexion and hair. In the account of the twin delivery of Jacob and Esau (Genesis xxv.) we read: "And the first came out red, all over like a hairy garment; and

they called his name Esau-Dr. Beddoes found among 737 English women 22 with red hair, 95 with fair hair, 240 with brown hair, 336 with dark-brown

hair and 38 with black hair. Other English data have been supplied by Leoners. He states that out of 1,410 in-dividuals there were 30 red, 108 fair, 338 tight brown, 807 dark brown, and 67 black.

In Caesar's time the Britons, Celts, Saxons, Gauls and Germans had either red or flaxen hair. The Celts have since become dark-haired.

A recent examination of the piles of Saxon bones in the crypt of an old church at Hythe revealed red hair still adhering to the skulls of those who had fallen in the contests on that coast of Britain with the early inhabitants.

the Northeastern provinces of England the red hair of the people's Danish an-cestors is familiar. The average brown tint of the English people's hair is sup-posed to represent an intermingling of Danish red and other red types with the black of the Norman race. The Irish and Scotch have retained, to a greater extent than the other peoples within the English realm, the primitive hair coloration, pre-

sumably because of greater stock purity.

In the northern latitudes of Scandinavia we generally find the Norwegians and Swedes with sandy hair.

In all climates the inhabitants of mountainous districts approximate in character to those of northern latitudes; for instance, the Swiss of the mountains above the plains of Lombardy have sandy hair as a

The natives of the Solomon group have frizzled or wooly hair, which they dye red or yellow, according to their fancy. Among the New Zealanders instances occur of red and saudy hair. Hair of a beautiful auburn tint is sometimes observed in girls of the Nga-ti-watua tribe.

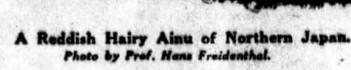
The hair of the Tahitians is not universally black, but in some instances has a russet tinge, and the same is observed at Samoa and Tonga. The Feejeans dye their hair in various colors, including red. The Somalee exquisite changes his hair to red

by the use of quicklimes. This matter of dyeing the hair or beard harks back to the Continent of Europe. It has not been wholly a savage custom. The red hair of Titian's women was a work of art on the part of the sitters no less than on that of the great painter. In those days it was a custom with the women to secure the Titian tint by artificial means. When this is borne in mind the frenzied lines of Ariosto, bewailing, in three indignant sonnets, the loss of his Alessandra's hair at the physician's order, seem a bit absurd.

This admiration for red hair and its artificial attainment engaged the fancies and efforts of the early English, Strutt, in writing of those Anglo-Saxon manuscripts in which the hair and beard are frequently painted in colors, says: "In some instances which are not so common the hair is represented of a bright red color, and in others it is of a green and orange hue. I have no doubt existing in my own mind that arts of some kind were practiced at this period to color the hair, but whether it was done by tingeing or dyeing it with liquids prepared for that purpose, according to the ancient Eastern custom, or by powders of different hues cast into it, agreeably to modern practice, I shall not presume to de-

In ancient times the nations who were the most polished, the most civilized and the most skilful in the fine arts were passionately fond of red hair. The Gauls, the ancestors in part of the modern French. had the same preference. The Turks are fond of women who have red hair. The inhabitants of Tripoli, who probably learned it from the Turks, give their hair a red tinge by the aid of vermillion. The women of Scinde and the Deccan are also fond of dyeing their hair red, as the Romans did, in imitation of German hair. in imitation of German hair.

in Spain red hair is admired almost to adoration. The Chinese term "Hung Maow Kwie" is a compliment to red-haired



rsons, meaning literally "beautiful red-

haired spirit."

A cross-section of a hair shows, from within outward, the medulla, or pith, then a middle fibrous portion, or cortex, making up the bulk of the hair, and a thin external layer composed of epithelial cells called the cuticle. The fibrous portion of the

tair shaft is the seat of its coloration. Davenport, working under the auspices of the Carnegie Institution (1909), con-cluded that there are two main types of pigment in human hair—a reddish yellow, which finds its intensest development in bright red, and a sepia brown, whose intensity varies from a light yellow to dark brown and black. The shades of hair depend upon the relative intensity of these pigments, which are derived from the colorg matter of the blood

In dark hair the reddish yellow pigment is overpowered by the sepia tone. The cortical colls even of black hair contain this reddish yellow pigment. The hair of the negro contains the same reddish yellow pigment as his white brother's; Leonard

says quite as much. Our hair proves that we are brothers all, and that our notions and prejudices regarding coloration are provincial, irrational

and superstitious. There are no scientific foundations for the legends concerning red hair. The idea that red-haired people are firmer in their convictions, more patriotic, more religious and more moral, when their hair is fine and

soft, than other people, and more brutal and sensual when it is coarse and harsh, is exactly on a par with the notion started by the missionaries who followed Caesar into Britain that red-hairedness connoted savage paganism, with all its primitive psychologic traits (paganism is paganism, whether it be red-haired or black-haired). The red-haired Teutonic barbarians spoken of by Tacitus (Hist. lib. lv.) were not barbarians because of the color of their hair, any more than the followers of Genghio Khan were barbarians because their hair was Mongolian black.
It is only when the red-haired person is

Paris. Who Ran Off with Helen of Troy, Was Red-Hended.

> encountered and regarded apart from what might be called his natural ethnic environment that uncommon traits are ascribed to him by ignorance, malice or envy. This is the key to the question: The red-haired person in an uncommon environment is not like other people in a conspicuous respect, and excites a psychologic reaction in the minds of commonplace folk. The same thing would be true of black-haired individuals in similar circumstances.

Democracy stupidly demands that we be all of one hue of hair. Alikaness is the chief consequence and aim of democracy; it is, indeed, the character by which we identify democracy. There are tremendous social forces working incessantly to make men alike, but they cannot prevent redhairedness. Through red hair Nature occasionally reminds us that mankind cannot be levelled and standardized.